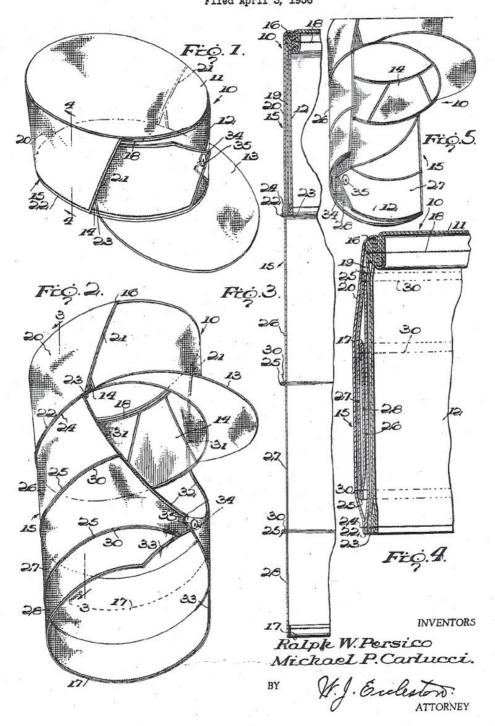
2,844,822

Filed April 3, 1956



United States Patent Office

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2,844,822

CAP WITH HAVELOCK

Ralph W. Persico, Philadelphia, Pa., and Michael P. Carlucci, Natick, Mass., assignors to the United States of America as represented by the Secretary of the Army

Application April 3, 1956, Serial No. 575,918 5 Claims. (Cl. 2—172)

(Granted under Title 35, U. S. Code (1952), sec. 266)

The invention described herein, if patented, may be ¹⁵ manufactured and used by or for the Government for governmental purposes, without the payment to us of any royality thereon.

The invention relates to havelocks for head coverings such as hats, caps or the like. Havelocks depend from the head covering to protect the head, neck and shoulders of the wearer from the weather, such as the sun and rain and/or from thermal radiations from nuclear explosions, as protection against vesicant gases or the like.

Such devices are well known, particularly in tropical countries and generally comprise a separate curtain of upright semi-cylindrical shape which is detachably secured to the lower edge of the rear and sides of the cap so as to depend therefrom and enclose the rear and sides of the wearer's head, neck and shoulders but being open at the front so as to not impede his vision. When not needed, such predecessor devices are detached from the cap, folded and stored either in a pocket or in the crown of the head covering. Obviously, considerable time is needed to unfold, arrange and attach such predecessor device to the head covering when needed. Also, such an arrangement is unsatisfactory in that the havelock is easily lost whereby it is not available when needed.

With the foregoing in view, it is an object of the invention to provide an improved havelock and/or an improved combination of head covering and havelock.

A further object is to provide an improved havelock which is permanently attached to a head covering and so constructed and arranged that it provides a pocket for storing itself when it is not needed.

Other objects and advantages reside in the particular structure and design of the havelock, the structure and design of the several elements of the same, combinations and sub-combinations of such elements with themselves and/or with a head covering, all of which will be readily apparent to those skilled in the art upon reference to the attached drawing in connection with the following specification wherein the invention is shown, described and claimed.

In the drawing:

Figure 1 is a perspective view taken from above and showing a head covering having a havelock according to the invention applied thereto, the havelock being shown in the folded or stored position;

Figure 2 is a perspective view taken from below and showing the havelock in the extended or operative position:

Figure 3 is an enlarged, fragmentary, vertical sectional view taken substantially on the plane of the line 3—3 of Figure 2:

Figure 4 is a sectional view like Figure 3 but taken substantially on the plane of the line 4—4 of Figure 1, and

Figure 5 is a small scale, diagrammatic perspective view like Figure 2 but showing an alternative way of 70 wearing the device.

Referring specifically to the drawing wherein like refer-

2

ence characters designate like parts in all views, 10 designates generally any suitable head covering to which the invention may be applied. In the embodiment illustrated, the head covering 10 comprises a cap which includes a crown portion which may comprise a crown piece 11, a side wall portion which may comprise the cylindrical wall 12 depending from the crown and a visor 13. Also, the side wall 12 in this species has been elasticized by two elastic inserts 14 to enable the cap to fit a plurality of head sizes. As so far described, the structure is conventional and forms no part of the invention apart from any combination or sub-combination hereinafter claimed.

The havelock according to the invention comprises an upright substantially semi-cylindrical curtain, generally designated by 15, and which may be constructed of any suitable flexible material. The curtain 15 has an upper edge 16 and a lower edge 17. Preferably, when crown and wall portions 11 and 12 are separate elements, the upper edge 16 is caught in the seam or row of stitching 18 by which the side wall 12 is connected to the crown piece 11. Thus, the curtain 15 depends from the upper edge of the side wall 12 and includes an upper panel 20 which overlies the same to provide a pocket 19 therebetween which is open at the front and bottom and which extends around the sides and rear of such side wall. The upper panel 20 has a pair of laterally spaced front edges 21 which define the front edges of the pocket 19. Preferably the elasticizing inserts 14, if present, are substantially entirely concealed by the upper panel 20.

The lower edge of the upper panel 20 is defined by a substantially horizontal crease 22 which is preferably located slightly below and parallel to the lower edge 23 of the side wall 12 of the head covering. Preferably, also, the crease 22 is permanentized by being sewed together in face-to-face relation by a line of stitching 24. Below the upper panel 20 a series of vertically spaced horizontal creases 25 define any suitable number of panels as 26, 27 and 28. Preferably each crease 25 is made a permanent crease by being sewed together by a line of stitches 30. The creases 22 and 25 provide fold lines for folding the havelock.

The curtain-providing depending panels 26, 27 and 28 each have two laterally spaced front edges as 31, 31 for the panel 26; 32, 32 for the panel 27; and 33, 33 for the lowermost panel 28. In the form of invention illustrated, the front edges of the curtain portion of the havelock are formed to provide points 34 which may be readily detachably connected together by an suitable separable fastener such as the button 35. The points 34 are best fastener such as the button 35. formed in the front edges 32 of the second lowest panel 27 so that the front edges 33 of the lowermost or bottom panel 28 are rearwardly and downwardly beveled. permits the height of the curtain to be varied by folding the bottom panel 28 on its crease 25 upwardly and inwardly to underlie the superjacent panel 27, as suggested in broken lines in Figure 2. The panel 28 will remain in this position because it is slightly more than a semi-cylinder and because the crease 25 faces radially inwardly so as to resist unfolding. That is to say, the groove portion of the crease is on the inner surface of the havelock while the rib portion thereof is on the outer surface of the same. Thus, the groove portion of the crease faces the axis of the havelock or faces radially inwardly thereof.

It should be noted in this connection that all of the creases 25 and the crease 22 face radially inwardly so that the havelock is roll-folded upwardly from the bottom to the folded or stored position of Figures 1 and 4. It should be noted also, that such roll-folding is facilitated by making the panels 20, 26, 27 and 28 successively

narrower. Thus, the havelock is stored in the pocket 19 from the unfolded position of Figures 2 and 3 by first folding the lowermost panel 28 inwardly and upwardly to the broken line position of Figure 2, then the panels 27 and 28 are folded inwardly and upwardly to underlie panel 26. Finally, the panels 26, 27, 28 are folded inwardly and upwardly on the crease 22 into the pocket 19 where the panels form a concentric stack. The points 34 of the front edges 33 of the panel 27 overlap in front of the side wall 12 and when connected by the separable 10 fastener 35 serve to secure the stack of panels in the pocket 19.

To unfold the stacked panels, it is only necessary to undo the fastener 35 and unroll the stack. Thereafter, the fastener 35 can be resecured to limit displacement of 15 the havelock by winds or blasts. When it is unnecessary or undesirable to secure the points 34 together in front of the wearer as shown in Figure 2, the connected points and associated side portions of the panels 26, 27 and 28 may be folded rearwardly unto the rear portions as sug- 20 gested in Figure 5 so that the entire curtain portion of the havelock is disposed rearwardly of the shoulders of the wearer. This last is a cooler arrangement and would generally be used when protection from the sun only is wanted. The lower panel 28 may be folded or unfolded 25 as desired but is preferably folded when this last arrangement is used.

It is apparent from the foregoing that the invention provides not only a novel and improved havelock but by draping it from an upper portion of the head covering a novel pocket for storing the folded havelock is provided. This arrangement not only prevents loss of the device but provides a havelock which can be quickly moved from the stored or folded position to the unfolded operative position without even removing the head cover- 35 ing from the head. This speed of operation is of the essence when the device is desired as a shield from thermal radiations or gases.

Moreover, while there has been shown and described what is now thought to be a preferred embodiment of 40 the invention, it should be understood that the same is susceptible of other forms and expressions. Consequently, the invention is not to be considered as being limited to the precise structure shown and described hereinabove except as hereinafter claimed.

1. In a cap having a substantially cylindrical side wall portion and a crown portion; the improvement comprising a havelock for said cap, said havelock having an upper edge secured to side and rear portions of said side 50 wall portion in the region of said crown portion, said havelock being formed with a plurality of parallel horizontal creases providing fold lines, said creases defining a series of horizontal panels, there being a top panel overlying side and rear portions of said side wall por- 55 tion and a plurality of depending panels, each depending panel having a height not greater than the height of said top panel, said depending panels when folded on said creases to a folded position providing a concentric series of panels between said top panel and at least the rear 60 and sides of said side wall portion of said cap, and means for readily releasably securing all of said panels in said folded position.

2. In a cap having a substantially cylindrical side wall portion and a crown portion; the improvement comprising a havelock for said cap, said havelock comprising a substantially semi-cylindrical curtain having an upper edge secured to side and rear portions of said side wall portion in the region of said crown portion, said curtain being formed with a plurality of vertically spaced parallel creases defining a plurality of depending panels, each crease being made permanent by a line of stitching connecting adjacent panels together in face-to-face relation close to each crease, there being a top panel overlying side and rear portions of said side wall portion and a plurality of depending panels, each depending panel having a height not greater than the height of said top panel, said depending panels when folded on said creases to a folded position providing a concentric series of panels between said top panel and at least the rear and sides of said side wall portion of said cap, and means for readily releasably securing all of said panels in said folded position.

3. In a head covering having side and crown portions; the improvement comprising a havelock having an upper edge, means securing said upper edge to said head covering between said crown and side portions, said havelock comprising an upper panel coextensive in height with said side portion of said head covering but having laterally spaced front edges so as to provide a pocket open at the bottom and also open at the front on opposite sides of said head covering, a series of parallel curtainproviding panels secured to said upper panel and normally depending therefrom below said side portion of said head covering, said series of panels being foldable upon themselves and said upper panel into said pocket to a retracted position, and means for readily releasably retaining said entire series of panels in said retracted

4. In a head covering having side and crown positions; the improvement comprising a havelock having an upper edge, a seam connecting said upper edge of said havelock and said side portion and said crown portion together, said havelock overlying said side portion and extending below the same, a vertical series of inwardly facing permanent horizontal creases formed in said havelock and dividing the same into a plurality of horizontal panels, and said creases being spaced progressively closer together from said upper edge downwardly whereby each panel is narrower than the one next above it.

5. A havelock according to claim 4, and a horizontal line of stitching connecting each crease together.

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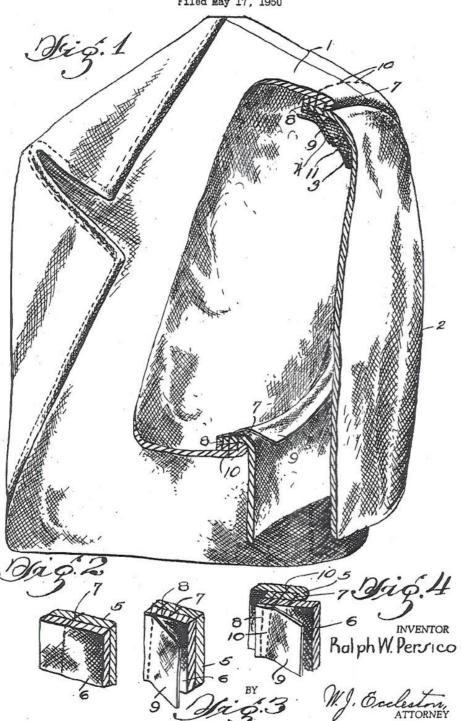
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METHOD OF SECURING COAT LININGS AND THE LIKE TO COATS

Filed May 17, 1950



OFFICE UNITED STATES PATENT

METHOD OF SECURING COAT LININGS AND THE LIKE TO COATS

Ralph W. Persico, Philadelphia, Pa. Application May 17, 1950, Serial No. 162,571

1 Claim. (Cl. 2-97)

(Granted under Title 35, U. S. Code (1952), sec. 266)

The invention described herein, if patented, may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

This invention relates to the fabrication of 5 coats and has for its primary object to modify the armhole structure of a coat, and particularly those provided with raised seams, so as to facilitate or speed-up the process of attaching such accessories as the lining, canvas and padding to 10 the proper portions of the body of a coat.

In the joining of a sleeve to the body of a coat, and particularly when raised seams are used for that purpose, it is customary to attach the lining, padding, etc. by hand sewing because of the 15 difficulty of using a sewing machine for that purpose. Such procedure is not only time consuming, but also frequently causes a distortion of the sleeve, as well as loss of fullness in the contiguous much weaker than machine-sewing, and consequently a garment so stitched frequently fails at the armhole area.

It is an object of the present invention therefore to incorporate in the armhole scam of the 25 coat a piece of tape, preferably of bias cut material, of sufficient width to permit the machine stitching thereto of the adjacent parts of the padding, lining, etc.

Other objects and advantages of the invention 30 will be apparent from the following description when taken in connection with the accompanying drawings in which.

Figure 1 is a fragmentary perspective view of a coat in which the present invention is incor- 35 porated, and with parts of the coat fabric cut away and most of the lining and stiffening omitted for clearness of illustration.

Figures 2, 3 and 4 are fragmentary perspective views illustrating one way in which the coat ma- 40 terial, sleeve material, and the armhole tape may be secured together.

The body of the coat is designated generally by the numeral i and the sleeve by the numeral 2. The coat may be provided with padding material 3. a lining 4, and other such accessories as may be desired.

In Figures 2, 3 and 4 the exterior coat material is indicated by the numeral 5 and the exterior sleeve material by the numeral 6, and the two 50 elements are joined by a line of machine stitching 7. The next step in the process, insofar as the present embodiment is concerned consists of applying a line of machine stitching 8 to connect a narrow fabric strip 9 of bias cut material to the 55 coat and sleeve material 5 and 6; and this strip or tape 9 completely encircles the armhole of the coat. In forming a raised seam at the juncture of the coat body and sleeve, the coat material 5 is turned back as indicated in Figure 4 and a line 60 of machine stitching 10 is then passed through the turned back portion 5 of the body of the coat,

the sleeve portion \$ and the fabric strip 9. This manner of uniting the strip 9 to the coat is embodied in the structure shown in Figure 1 and the same reference numerals are applied to those elements of the coat in that figure.

By thus incorporating a narrow fabric strip in the seam connecting the coat and sleeve, it will be apparent that a means is provided by which such accessories as the lining, padding, etc., may be readily united with the coat by machine stitching such as indicated by the numeral 11 in Figure 1.

By reason of the incorporation of a narrow strip of fabric about the armhole of the coat, it is not only possible to eliminate the time consuming process of hand stitching the lining and associated materials to the armhole seam, but also a more durable structure is provided. Moreover, by reason of the fact that the lining is machine parts of the garment. Moreover, hand-sewing is 20 stitched to the coat the possibility of distortion of the coat and loss of fullness about the armhole is eliminated.

> It will be understood, of course, that while the present illustration of the invention discloses three separate and distinct lines of machine stitching used successively, the invention is not so limited, inasmuch as the essential feature is the incorporation of the strip or tape 9 at the juncture of the sleeve and body of a coat provided with a raised seam at that point, regardless of the particular steps used in uniting the several elements.

> From the foregoing description and the attached drawings it will be apparent to those skilled in the art that I have devised a simple yet reliable construction of coat sleeve construction which not only provides for the fabrication of a more sturdy coat but also facilitates and expedites its fabrication due to the fact that the lining, padding, etc. may be machine stitched into position, thereby eliminating the time-consuming hand stitching now in general use for that purpose.

I claim:

The process of securing coat linings, padding or the like to a coat, which comprises uniting the coat material and sleeve material by a line of machine stitching about the armhole of a coat, machine stitching a narrow strip of fabric adjacent one of its edges directly to the seam thus formed, folding back the coat material and machine stitching it to the sleeve material to provide a raised seam, and machine stitching a coat lining or the like to the free edge of the strip.

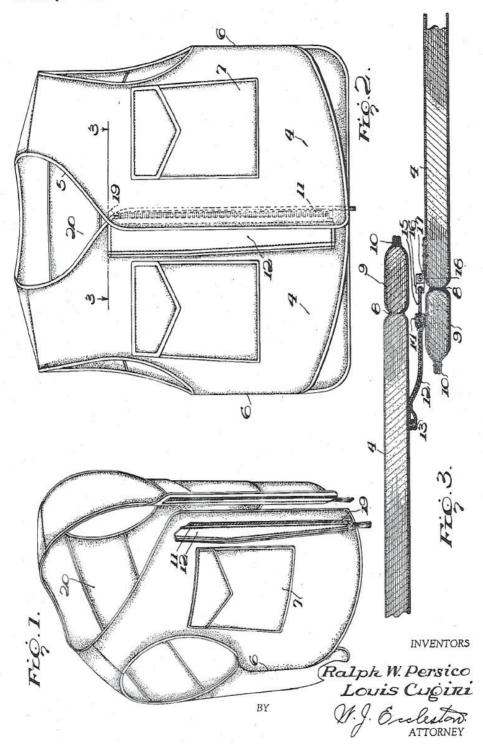
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ACTION FRONT ARMORED VEST

Filed April 13, 1953



UNITED STATES PATENT OFFICE CERTIFICATE OF CORRECTION

Patent No. 2,844,822

July 29, 1958

Ralph W. Persico et al.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 4, line 37, for "positions" read -- portions --.

Signed and sealed this 11th day of November 1958.

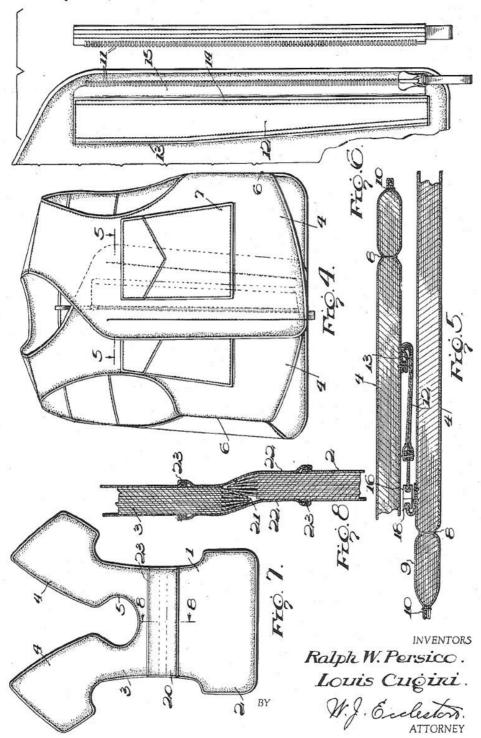
(SEAL) Attest:

KARL H. AXLINE

Attesting Officer

ROBERT C. WATSON Commissioner of Patents ACTION FRONT ARMORED VEST

Filed April 13, 1953



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both sides of the front and back elements as indicated by the numeral 23.

From the foregoing description taken in connection with the accompanying drawings, it will be apparent to those skilled in the art that I have devised an exceedingly simple and inexpensive construction of armored vest which greatly enhances its value due to the fact that while the panels themselves are quite stiff due to the many layers of material the garment has been rendered considerably more adaptable to movements of the wearer than 10 heretofore, due to the novel arrangement by which relative movement between the panels is permitted.

In accordance with the patent statutes we have described what we now believe to be the preferred form of construction, but since minor changes may be made in 15 structural details without departing from the spirit of the invention it is intended that all such changes be included within the scope of the appended claim.

We claim:

An armored vest comprising a back and front sections, the front sections being secured to the back section and overlapping each other a substantial distance with

their respective free edges extending beyond the center line of the front of the vest, said front sections formed of laminated material sufficiently thick and stiff to normally lie in overlapped relationship, a vertically-extending flap of relatively thin material secured to the inner face of one front section at a distance from the free edge there-of greater than the width of the flap and of a length substantially the same as the length of the section, fastener means mounted on and extending throughout the free edge of the flap, and complementary fastening means secured to the outer face of the other front section, whereby a transverse sliding movement between the two sections is permitted.

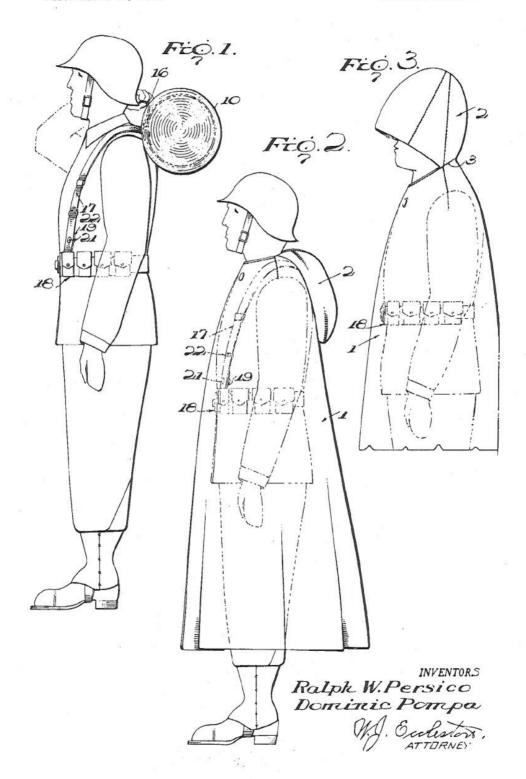
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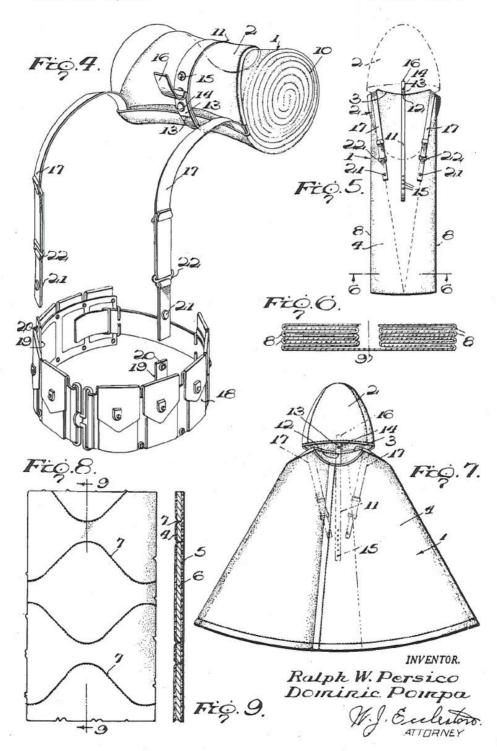
QUICK-APPLYING CAPE AND HOOD

Filed March 25, 1954



QUICK-APPLYING CAPE AND HOOD

Filed March 25, 1954



2,745,104

QUICK-APPLYING CAPE AND HOOD

Ralph W. Persico and Dominic Pompa, Philadelphia, Pa., assignors to the United States of America as represented by the Secretary of the Army

Application March 25, 1954, Serial No. 418,796 2 Claims. (Cl. 2—88)

(Granted under Title 35, U. S. Code (1952), sec. 266)

The invention described herein, if patented, may be 15 manufactured and used by or for the Government for governmental purposes, without the payment to us of any royality thereon.

This invention relates to combined capes and hoods and particularly to capes and hoods lined with thermal insulating material, such as glass wool, and coated with aluminum or other radiation-reflecting material, and having an outer fabric which may be rendered flame resistant by any of the well-known standard processes.

A primary object of the present invention resides in ²⁵ folding and rolling a combined cape and hood so that it will occupy a relatively small space and can be readily supported across the back or shoulders of a soldier or other prospective wearer.

Another object of the invention resides in folding and 30 rolling the cape portion inside-out so that when released for use it can automatically fall into position over the body of the wearer with the inner side next to wearer's hody.

A still further object of the invention consists in securing the package in rolled condition by means of a strap and snap fastener and supporting the same across the wearer's shoulders so that the cape may be quickly released and fall into position by reaching backward over one shoulder or the other and applying a pulling force to the strap to release the snap fastener.

Other objects and advantages of the invention will be apparent from the following description when taken in connection with the accompanying drawings, in which,

Figure 1 is a side elevation showing the improved combination cape and hood package in position for use, with the release tab about to be pulled;

Figure 2 is a similar view of the released package showing the cape in operative position but with the hood suspended from the upper end thereof at the back of the 50 wearer's neck;

Figure 3 is a view similar to Figure 2 but showing the hood in position on the wearer's head;

Figure 4 is a perspective view of the novel cape and hood package in relation to the cartridge belt to which it 55 is attached for support on the wearer's shoulders;

Figure 5 is a plan view of the partly formed package prior to rolling into final position;

Figure 6 is a sectional view taken on line 6—6 of Figure 5;

Figure 7 is a plan view of the cape and hood in open

Figure 8 is a fragmentary plan view of the body of the cape, and

Figure 9 is a section taken on line 9—9 of Figure 8. 65
The cape and hood of the present invention are indicated by the numerals 1 and 2 respectively, the back portion of the hood being connected to the upper edge of the cape by a line of stitching 3. In the present illustration both the cape and the hood are shown as formed 70 of inner and outer plies 4 and 5 respectively and an intermediate layer 6. The outer fabric layer 5 may be

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rendered flame resistant, if desired, by any of the well-known processes, and the inner layer 4 is preferably treated to render it water resistant. The intermediate layer 6 of the cape and hood is preferably formed of a thermal insulating material such as glass wool, or the outer face of the outer fabric 5 may be provided with aluminum or other radiation reflecting metallic coating if desired. The article as thus constructed may be quilted as indicated by the numeral 7 so as to maintain the several parts in their proper operative positions. It is to be understood, however, that the present invention is concerned chiefly with the packaging of a cape and hood so that it may be conveniently supported on the wearer's shoulders and quickly released to place the elements in their operative positions, rather than in the specific structural features of the cape and hood.

In the preliminary stages of forming the package the cape and hood are spread out in open position as indicated in Figure 7 and a plurality of longitudinal folds 8 are formed on each side of the center line 9 (Figure 6) of the hood and cape preliminary to the final rolling of these items into the completed package. This intermediate or partly formed package is clearly illustrated in the plan view of Figure 5, and as clearly indicated in that view the two stacks of folds are sector shaped with their tapered ends at the upper or neck end of the partly formed package.

The rolling operation is begun at the lower end of the cape and rolled up to cylindrical shape as shown at 10 in Figure 4 with the hood 2 overlapping the outer convolution of the roll. It should be here pointed out that the folding of the cape is done with inner layer 4 on the outside so that the cape is actually wrong side-out when rolled up into the cylindrical form 10, but the hood 2 is not so inverted. In order to retain the cape and hood in packaged form until ready for use, a strap 11 is provided and has an end portion attached to the upper end of the cape on the inner side thereof as indicated by the numeral 12. An extension 13 on the strap is provided with one element 14 of a snap fastener while complementary elements of a snap fastener are serially arranged on the free end of the strap and indicated by the numeral 15. A finger grip portion 16 extends from the portion 13, and as indicated in Figures 1 and 4 is directly behind the neck of the wearer when the package is in position for use, so that it may be readily grasped by merely placing the hand behind the head as indicated in Figure 1.

To support the completed package in position the neck portion of the cape is provided with a pair of straps 17 which are adapted to extend forwardly over the shoulders of the wearer and downwardly towards a cartridge belt or the like 18. The cartridge belt may be provided with a pair of upwardly extending tabs 19 provided with one of the elements 20 of a snap fastener which cooperates with complementary snap fastener elements 21 on the free ends of the straps 17. These straps may of course be provided with any type of adjustment 22 for adapting the attachment to persons of various sizes.

While this quick-applying cape and hood package may have various uses, it is intended primarily for military use and quickly applied protection against thermal radiation, radiations from atomic bombs and against napalm. As heretofore stated the package 10, that is the cape portion thereof, is folded and rolled up inside-out so that by merely pulling on the tab 16 so as to release the strap 11 from its encircling engagement with the roll 10 the cape is allowed to unroll and unfold downwardly so as to envelop the body of the wearer as clearly indicated in Figures 2 and 3, and the hood 2 may be pulled up over the wearer's head if and when desired. It is thus seen that the wearer may be quickly enveloped in this protective

clothing by a mere pull of the operator's hand on the

In accordance with the patent statutes, we have described what we now consider to be the preferred form of the invention, but inasmuch as various minor changes may be made in structural details without departing from the spirit of the invention, it is intended that all such changes be included within the scope of the appended claims.

We claim:

tab 16.

1. In combination, a combined cape and hood, said cape being folded inside-out into a plurality of longitudinal folds and rolled up inside-out and overlapped by the hood, a strap encircling the package thus formed, snap fastener means on the strap for releasably securing the strap in position about the package, means for supporting the package across the shoulders of the wearer, and a forwardly-extending tab on the free end of the package-encircling strap providing a finger grip, whereby the cape may be released by a forward pull on the strap so as to unfold by gravity into operative position as a covering for the wearer's body.

2. In combination a combined cape and hood, said cape being folded inside-out into a plurality of longi-

tudinal folds and rolled up inside-out and overlapped by the hood, a strap encircling the package thus formed, snap fastener means on the strap for releasably securing the strap in position about the package, a pair of straps connected to the shoulder portion of the cape in spaced relation and adapted to extend forwardly across the shoulders of the wearer, a belt for encircling the waist of the wearer, complementary snap fasteners on the free ends of said pair of straps and on said belt for releasably supporting the package across the shoulders of the wearer, and a forwardly-extending tab on the free end of the package-encircling strap providing a finger grip, whereby the cape may be released by a forward pull on the strap so as to unfold by gravity into operative position as a covering for the wearer's body.

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4

OBITUARIES

Ralph W. Persico

PHILADELPHIA — Services for Ralph W. "Bill" Persico, 71, retired executive of H. Freeman & Son, will take place Thursday in the Immaculate Heart of Mary Church, 8815 Cathedral Road, Andora, Pa.

Persico died Sunday night following a short illness.

He retired last year as executive vice-president of the natural-shoulder clothing firm after 30 years with the company. During that time, he also headed the company's design and quality control department. Persico was often referred to as the "Tailor of the Presidents," particularly Richard M. Nixon and Dwight D. Eisenhower. He was a long-time, active member of the Internation-

al Association of Clothing Designers and the local chapter of the IACD.

During World War 2 and up until 1968, Persico worked with the U.S. Department of Defense in developing military uniforms.

Persico is survived by his wife, Teresa; two daughters; a son; and seven grandchildren.

A family spokesman said contributions may be made to the American Cancer Society.

Bill Persico Dies; Clothing Designer

Ralph "Bill" Persico, husband of Theresa B. Sokolowski Persico, of Andorra, died Jan. 17 at Pennsylvania Hospital. He was 71.

Mr. Persico was a prominent clothing designer and executive. Among his clients were former president Richard M. Nixon and Mayor Frank Rizzo.

For more than 30 years, Mr. Persico was associated with the H. Freeman & Co., men's clothing manufacturers. In 1971 he was named vice president for design and subsequently headed the operations and manufacturing sector of the company.

Mr. Persico's career blossomed during World War Two when he was awarded the Bronze Star for his work, in the design and research of military clothing such as the armored jacket. Mr. Persico was member of the Philadelphia chapter of the International Assn. of Clothing Designers, serving as president for several years. He also taught at the Philadelphia College of Textiles Science.

During the 1950s, Mr. Persico was a spectator at atomic ; testing at Yucca Flats.

Surviving besides his wife are two daughters, Mary Ellen C. Gabriele and Patricia Middlemiss; a son, Richard L. Persico; three brothers, Alfonso G. George W. and James J. Persico; two sisters, Eleanor H. Muratore and Rose P. Petrella, and seven grandchildren.

Arrangements were by Koller Funeral Home.

Mass of Christian Burial' was celebrated Jan. 20 at Immaculate Heart of Mary Church. Burial was in Holy Sepulchre Cemetery. 1

2,743,446

ACTION FRONT ARMORED VEST

Ralph W. Persico and Louis Cugini, Philadelphia, Pa., assignors to the United States of America as represented by the Secretary of the Army

Application April 13, 1953, Serial No. 348,601

1 Claim. (Cl. 2-2.5)

(Granted under Title 35, U. S. Code (1952), sec. 266)

The invention described herein, if patented, may be 15 manufactured and used by or for the Government for governmental purposes, without the payment to us of any royalty thereon.

This invention relates to vests and coats generally, but is especially intended for use in armored vests of the type disclosed in the pending application of Russell W. Ehlers, Ser. No. 291,366, filed on June 2, 1952, now Patent No. 2,640,987 granted June 9, 1953.

In garments of this type the body of the garment is relatively thick and/or stiff so that the wearer is considerably restricted in the movement of his arms, as for instance in the handling of a rifle or the like. It is an object of this invention therefore to so design and construct the garment that certain of the parts are readily movable with respect to each other so that the wearer's arms are relatively free and may be used in a more or less normal manner.

Another object of the invention consists in the formation of an armored garment in which a vertical flap has one edge secured to the front of the garment at one side of the center opening and is provided with fastening means along its free edge for cooperation with complementary fastening means situated on the garment on the opposite side of the center opening, whereby the front portions of the garment may slide one upon the other in response to movements of the wearer's arms.

Other objects and advantages of the invention will be apparent from the following description when taken in connection with the accompanying drawings, in which, 45

Figure 1 is a perspective view of the improved garment in open position;

Figure 2 is a front elevational view of the armored vest in closed position;

Figure 3 is an enlarged sectional view taken on the 50 line 3—3 of Figure 2 and looking in the direction of the arrows:

Figure 4 is a view similar to Figure 2 but showing the front panels and their connecting flaps in relative positions which they are caused to take when the arms of 55 the wearer are brought toward each other;

Figure 5 is an enlarged sectional view taken on the line 5—5 of Figure 4;

Figure 6 is an enlarged detail of the flap and the zippertype fastener used for securing the garment in closed 60 position:

Figure 7 is a plan view of a partly formed blank which is employed in forming the garment shown in the several figures, and,

Figure 8 is an enlarged sectional view taken on the line 65 8—8 of Figure 7.

The partly formed blank, which is generally indicated by the numeral 1, is composed of a back section 2 and a front section 3 provided with front panels 4 and a neck opening 5.

Each of the sections 2 and 3 is formed of a plurality of layers of flexible material of the general type defined 2

in the Ehlers application heretofore referred to, and since this structure forms no part of the present invention it need not be described in further detail.

As will be obvious the armored vest illustrated in the present disclosure is formed by folding down the front panel portions 4—4 and securing their edges to the back 2 along the seams 6, as shown in Figure 4, and these panels may be provided with pockets 7 if desired. Adjacent their free edges the front panels 4 are provided with vertical lines of stitching 8 which provide the free edge portions 9 seamed at their edges by lines of stitching as indicated by numeral 10.

In order to secure the front panels 4 in closed position a zipper 11 is employed although it will be understood that other types of fastening means could be used. However, if the fastening means were secured directly to the adjoining edges of the relatively stiff panels 4, which provide the front opening of the garment, it will be obvious that the wearer would have little use of his arms particularly in attempting to bring them toward each other as would be necessary in grasping a rifle or other implement. To obviate this drawback to a garment of this type a vertical flap 12 has been incorporated in the garment. This flap is relatively thin and flexible being shown as formed of two layers of material united adjacent their edges, and one edge of this flap is secured to the front face of a front panel 4 at a distance from its free edge as indicated by the numeral 13. The free edge of the flap 12 has secured thereto by lines of stitching 14 a runner 15 which carries a series of scoops 16.

Secured to the rear face of the other front panel 4 is a runner 17 having a series of scoops 18 mounted on its free edge for cooperation with the scoops 16. In normal positions of the parts, as shown in Figures 2 and 3, the panels 4 are slightly overlapped as clearly indicated in Figure 3, it being only necessary to swing the front element 9 slightly to one side for the purpose of operating the slide 19 (Figure 2) which cooperates with the scoops 16—18.

This feature of placing one series of fastening means on the free edge of the vertical flap 12, which has substantial width, permits relative lateral movement of the panels 4-4 when the wearer moves his arms. This relative movement between these parts of the garment is clearly indicated by comparing elevational views of Figures 2 and 4 and sectional views in Figures 3 and 5. In Figures 2 and 3 the garment is shown in its normal position with the front of the garment closed; while in Figures 4 and 5 the front of the garment is still closed but the two sections 4-4 have moved relative to each other so as to be very substantially overlapped. This movement of the two sections has been caused by the wearer bringing his arms closer together across his chest which movement has been permitted by reason of the flexible flap 12 reversing its position.

The back section 2 of the garment if formed of one single piece of heavily laminated fabric would be extremely cumbersome. For instance, if the wearer of such a garment were to lie prone on the ground there would be a tendency for the upper edge of the back of the garment to be forced against the base of the wearer's head with the attendant possibility of knocking off his helmet or other headgear which might be worn at the time. In order to overcome this and other such difficulties the present garment is provided with the transversely extending flexible joint 20. This joint is clearly disclosed in Figure 8 in which the back 2 is shown as formed of upper and lower sections arranged in overlapping condition as indicated by numeral 21, and this sliding joint arrangement is inclosed with the fabric sheets 22 which are stitched to